

**Braelock**

Type II 24-hr 1 YR Rainfall=2.10"

Prepared by HydroCAD SAMPLER 1-800-927-7246 www.hydrocad.net

Printed 4/29/2015

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Page 1

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**Summary for Subcatchment 1S: POI-1**

Runoff = 8.42 cfs @ 13.16 hrs, Volume= 2.573 af, Depth&gt; 0.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 1 YR Rainfall=2.10"

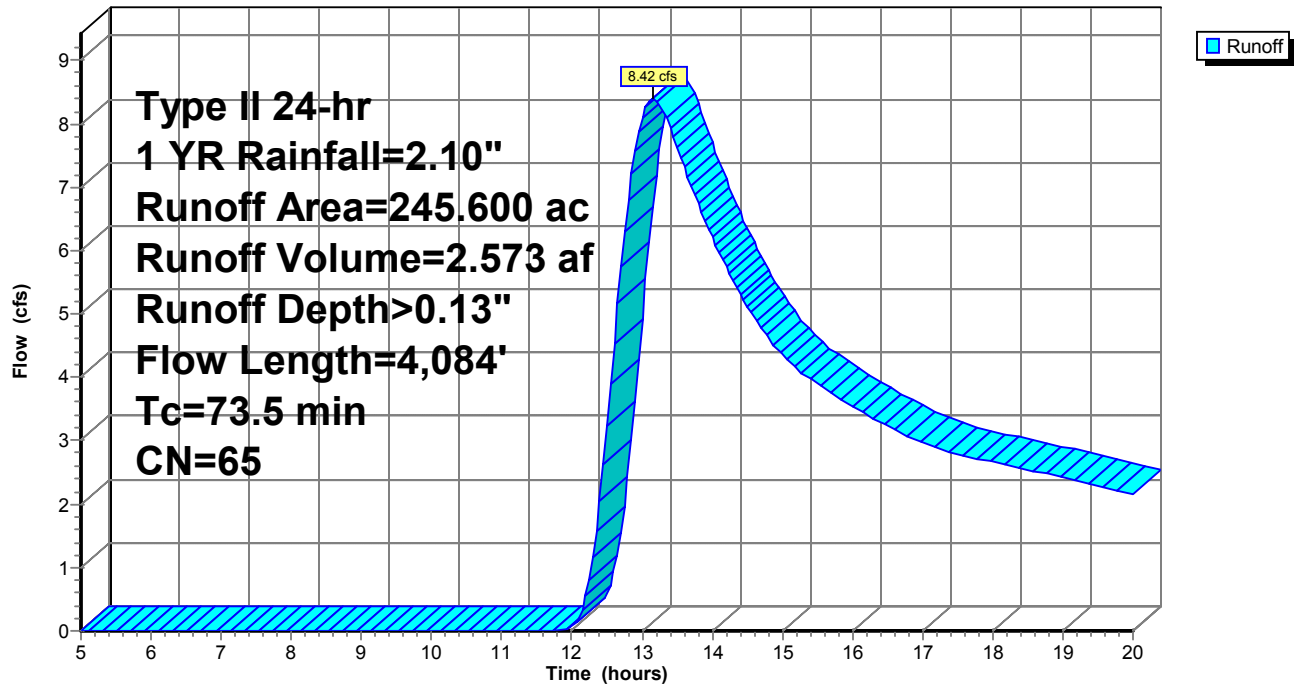
Area (ac)	CN	Description
33.000	51	1 acre lots, 20% imp, HSG A
10.700	68	1 acre lots, 20% imp, HSG B
4.800	79	1 acre lots, 20% imp, HSG C
10.000	84	1 acre lots, 20% imp, HSG D
32.200	30	Woods, Good, HSG A
31.300	55	Woods, Good, HSG B
3.200	70	Woods, Good, HSG C
112.100	77	Woods, Good, HSG D
4.800	83	Paved roads w/open ditches, 50% imp, HSG A
0.600	89	Paved roads w/open ditches, 50% imp, HSG B
0.800	92	Paved roads w/open ditches, 50% imp, HSG C
2.100	93	Paved roads w/open ditches, 50% imp, HSG D
245.600	65	Weighted Average
229.750		93.55% Pervious Area
15.850		6.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.3000	0.11		<b>Sheet Flow, Trace-2 Sheet</b> Woods: Dense underbrush n= 0.800 P2= 2.30"
51.0	1,942	0.0161	0.63		<b>Shallow Concentrated Flow, Trace 2 Shallow</b> Woodland Kv= 5.0 fps
7.6	2,042	0.0051	4.47	787.22	<b>Channel Flow, Trace 2 Channel</b> Area= 176.0 sf Perim= 80.4' r= 2.19' n= 0.040 Winding stream, pools & shoals
73.5	4,084	Total			

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### Subcatchment 1S: POI-1

Hydrograph



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### Summary for Subcatchment 1S: POI-1

Runoff = 13.59 cfs @ 13.08 hrs, Volume= 3.663 af, Depth> 0.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 2 YR Rainfall=2.30"

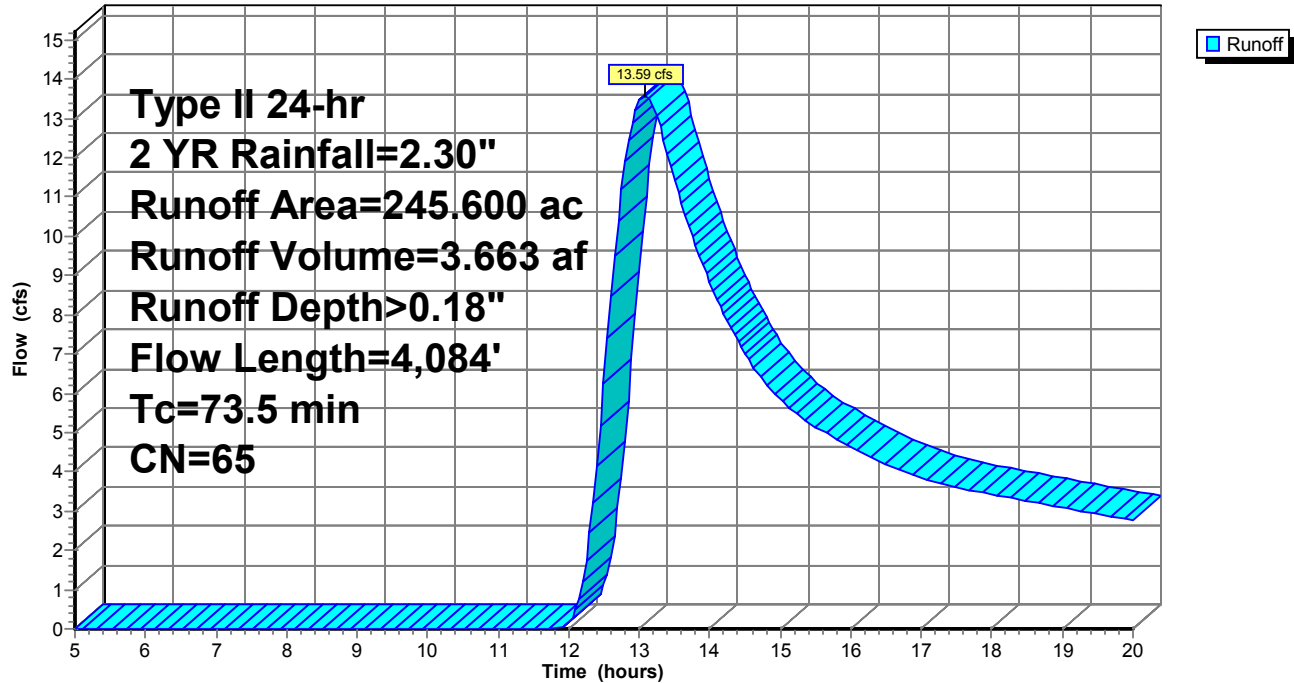
Area (ac)	CN	Description
33.000	51	1 acre lots, 20% imp, HSG A
10.700	68	1 acre lots, 20% imp, HSG B
4.800	79	1 acre lots, 20% imp, HSG C
10.000	84	1 acre lots, 20% imp, HSG D
32.200	30	Woods, Good, HSG A
31.300	55	Woods, Good, HSG B
3.200	70	Woods, Good, HSG C
112.100	77	Woods, Good, HSG D
4.800	83	Paved roads w/open ditches, 50% imp, HSG A
0.600	89	Paved roads w/open ditches, 50% imp, HSG B
0.800	92	Paved roads w/open ditches, 50% imp, HSG C
2.100	93	Paved roads w/open ditches, 50% imp, HSG D
245.600	65	Weighted Average
229.750		93.55% Pervious Area
15.850		6.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.3000	0.11		<b>Sheet Flow, Trace-2 Sheet</b> Woods: Dense underbrush n= 0.800 P2= 2.30"
51.0	1,942	0.0161	0.63		<b>Shallow Concentrated Flow, Trace 2 Shallow</b> Woodland Kv= 5.0 fps
7.6	2,042	0.0051	4.47	787.22	<b>Channel Flow, Trace 2 Channel</b> Area= 176.0 sf Perim= 80.4' r= 2.19' n= 0.040 Winding stream, pools & shoals
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### Subcatchment 1S: POI-1

Hydrograph



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### Summary for Subcatchment 1S: POI-1

Runoff = 50.72 cfs @ 12.95 hrs, Volume= 10.303 af, Depth> 0.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 10 YR Rainfall=3.20"

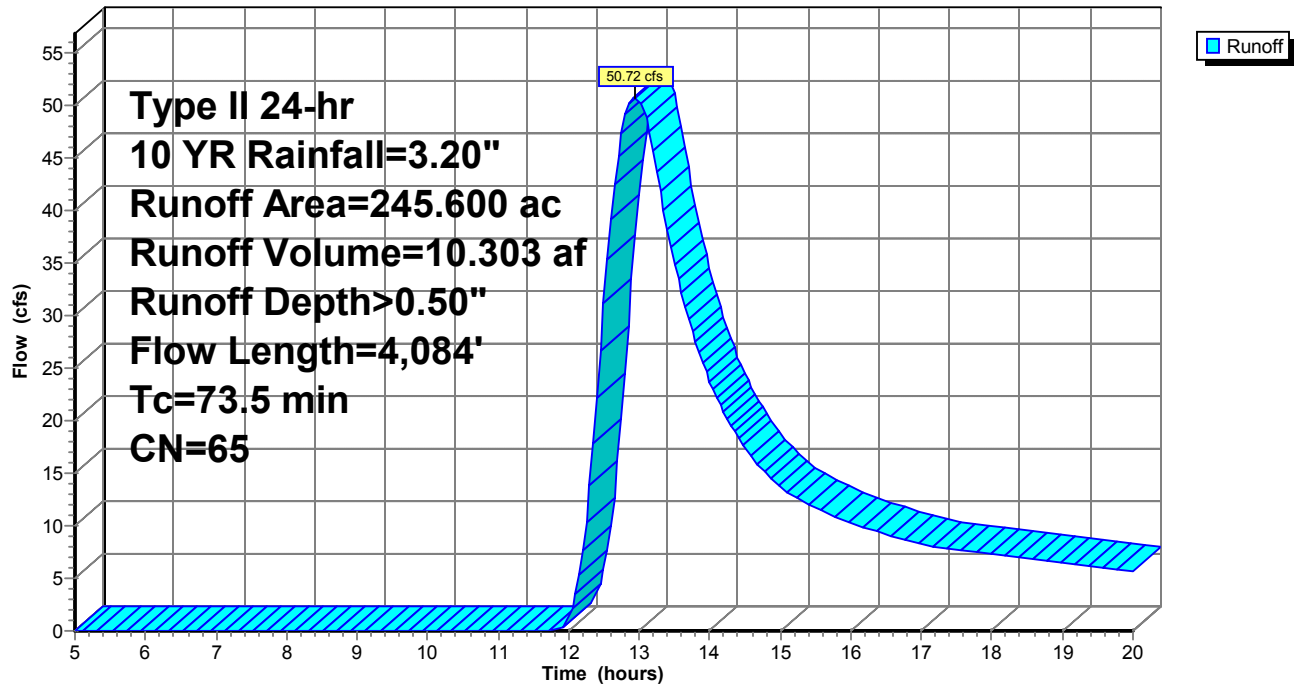
Area (ac)	CN	Description
33.000	51	1 acre lots, 20% imp, HSG A
10.700	68	1 acre lots, 20% imp, HSG B
4.800	79	1 acre lots, 20% imp, HSG C
10.000	84	1 acre lots, 20% imp, HSG D
32.200	30	Woods, Good, HSG A
31.300	55	Woods, Good, HSG B
3.200	70	Woods, Good, HSG C
112.100	77	Woods, Good, HSG D
4.800	83	Paved roads w/open ditches, 50% imp, HSG A
0.600	89	Paved roads w/open ditches, 50% imp, HSG B
0.800	92	Paved roads w/open ditches, 50% imp, HSG C
2.100	93	Paved roads w/open ditches, 50% imp, HSG D
245.600	65	Weighted Average
229.750		93.55% Pervious Area
15.850		6.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.3000	0.11		<b>Sheet Flow, Trace-2 Sheet</b> Woods: Dense underbrush n= 0.800 P2= 2.30"
51.0	1,942	0.0161	0.63		<b>Shallow Concentrated Flow, Trace 2 Shallow</b> Woodland Kv= 5.0 fps
7.6	2,042	0.0051	4.47	787.22	<b>Channel Flow, Trace 2 Channel</b> Area= 176.0 sf Perim= 80.4' r= 2.19' n= 0.040 Winding stream, pools & shoals
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### Subcatchment 1S: POI-1

Hydrograph



**Braelock**

Type II 24-hr 25 YR Rainfall=4.10"

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Page 7

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### Summary for Subcatchment 1S: POI-1

Runoff = 105.21 cfs @ 12.87 hrs, Volume= 19.135 af, Depth> 0.93"

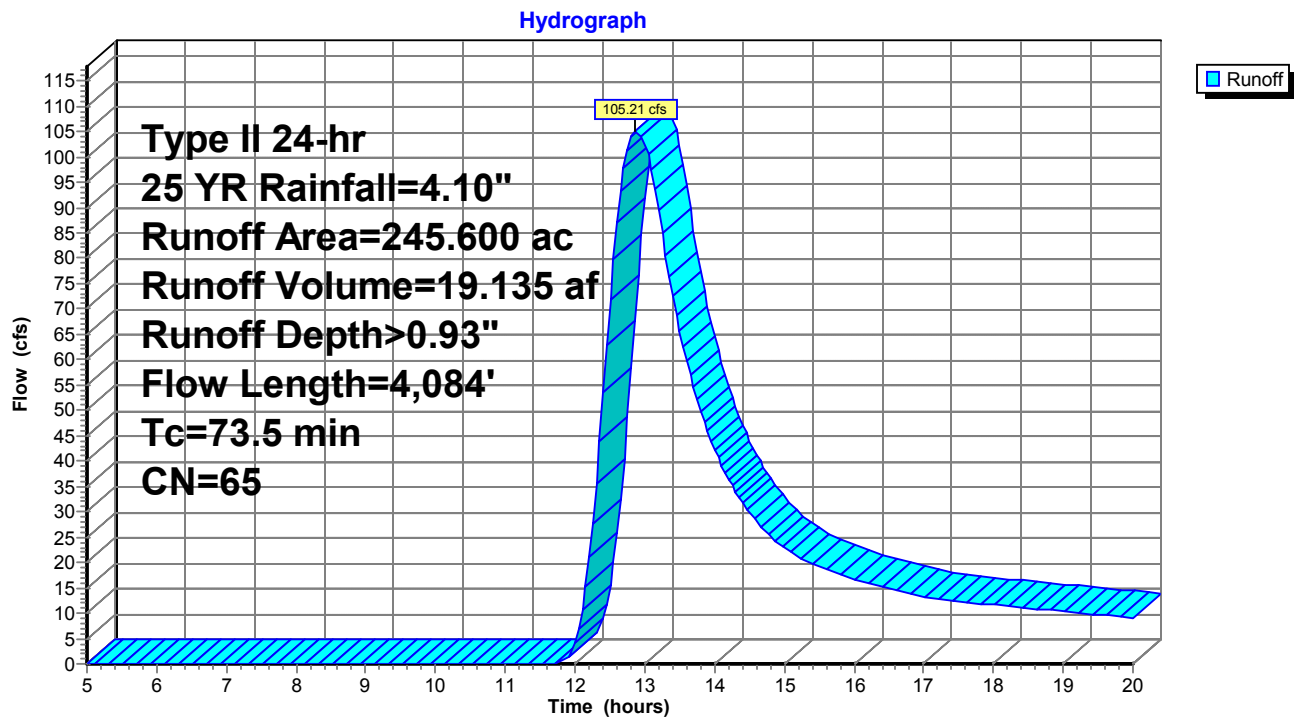
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 25 YR Rainfall=4.10"

Area (ac)	CN	Description
33.000	51	1 acre lots, 20% imp, HSG A
10.700	68	1 acre lots, 20% imp, HSG B
4.800	79	1 acre lots, 20% imp, HSG C
10.000	84	1 acre lots, 20% imp, HSG D
32.200	30	Woods, Good, HSG A
31.300	55	Woods, Good, HSG B
3.200	70	Woods, Good, HSG C
112.100	77	Woods, Good, HSG D
4.800	83	Paved roads w/open ditches, 50% imp, HSG A
0.600	89	Paved roads w/open ditches, 50% imp, HSG B
0.800	92	Paved roads w/open ditches, 50% imp, HSG C
2.100	93	Paved roads w/open ditches, 50% imp, HSG D
245.600	65	Weighted Average
229.750		93.55% Pervious Area
15.850		6.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.3000	0.11		<b>Sheet Flow, Trace-2 Sheet</b> Woods: Dense underbrush n= 0.800 P2= 2.30"
51.0	1,942	0.0161	0.63		<b>Shallow Concentrated Flow, Trace 2 Shallow</b> Woodland Kv= 5.0 fps
7.6	2,042	0.0051	4.47	787.22	<b>Channel Flow, Trace 2 Channel</b> Area= 176.0 sf Perim= 80.4' r= 2.19' n= 0.040 Winding stream, pools & shoals
73.5	4,084	Total			

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### Subcatchment 1S: POI-1





**Braelock**

Type II 24-hr 50 YR Rainfall=4.70"

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Page 9

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### Summary for Subcatchment 1S: POI-1

Runoff = 148.17 cfs @ 12.85 hrs, Volume= 25.926 af, Depth> 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 50 YR Rainfall=4.70"

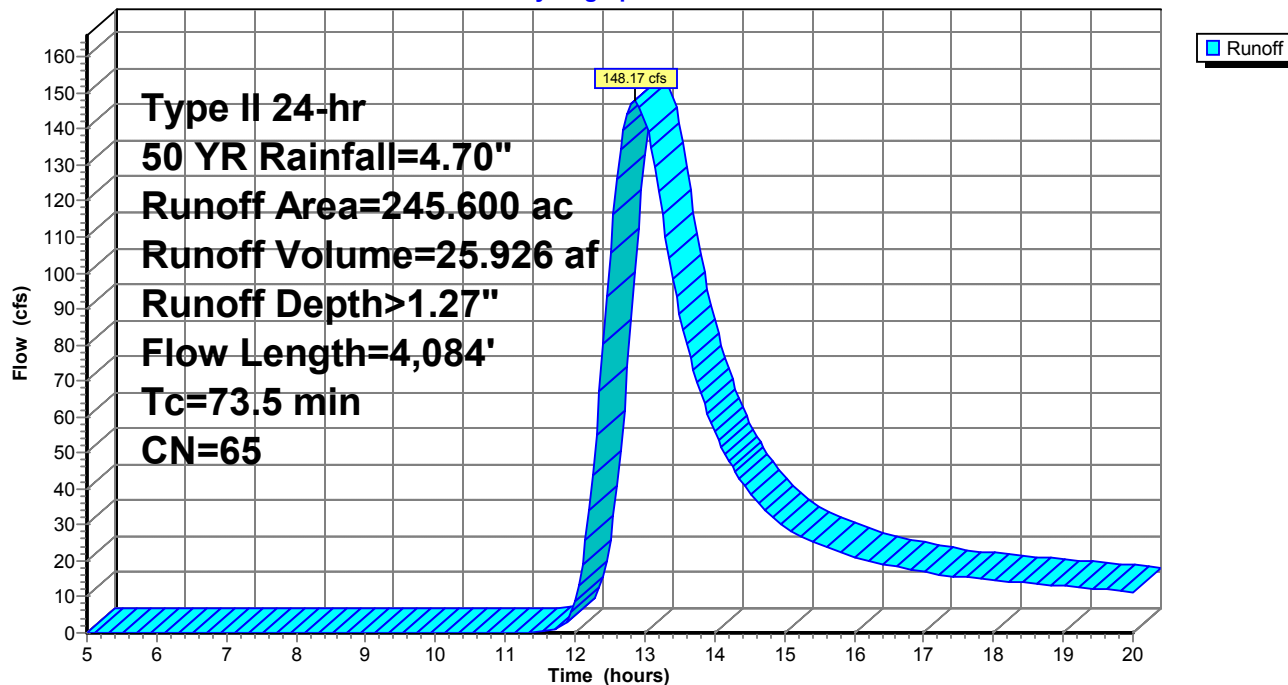
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31.300	55	Woods, Good, HSG B
3.200	70	Woods, Good, HSG C
112.100	77	Woods, Good, HSG D
4.800	83	Paved roads w/open ditches, 50% imp, HSG A
0.600	89	Paved roads w/open ditches, 50% imp, HSG B
0.800	92	Paved roads w/open ditches, 50% imp, HSG C
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### Summary for Subcatchment 1S: POI-1

Runoff = 186.81 cfs @ 12.84 hrs, Volume= 32.024 af, Depth> 1.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 100 YR Rainfall=5.20"

Area (ac)	CN	Description
33.000	51	1 acre lots, 20% imp, HSG A
10.700	68	1 acre lots, 20% imp, HSG B
4.800	79	1 acre lots, 20% imp, HSG C
10.000	84	1 acre lots, 20% imp, HSG D
32.200	30	Woods, Good, HSG A
31.300	55	Woods, Good, HSG B
3.200	70	Woods, Good, HSG C
112.100	77	Woods, Good, HSG D
4.800	83	Paved roads w/open ditches, 50% imp, HSG A
0.600	89	Paved roads w/open ditches, 50% imp, HSG B
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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.3000	0.11		<b>Sheet Flow, Trace-2 Sheet</b> Woods: Dense underbrush n= 0.800 P2= 2.30"
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### Subcatchment 1S: POI-1

Hydrograph

